

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A reflector comprising:

a reflection substrate; and

an optical diffusion layer deposited on the reflection substrate so as to flatten the surface thereof,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view and a surface of each reflection inclined plane is provided with concave portions having a depth within a range of 0.3 μm to 3 μm irregularly, adjacent concave portions arranged irregularly at a pitch between 1 μm and 30 μm , and

wherein the optical diffusion layer is a transparent resin or a transparent adhesive having fine particles dispersed therein, and a thickness of a thickest portion of the optical diffusion layer is in the range of between 30 μm and 200 μm .

2. (Original) A reflector according to Claim 1, wherein a haze of the optical diffusion layer is between 15% and 30%.

3.(Original) A reflector according to Claim 1, wherein an inclined angle θ of the reflection inclined plane with respect to a surface of the reflection substrate is between 0° and 30°.

4. (Currently amended) A liquid crystal display comprising:

a liquid crystal cell which comprises substrates opposing each other and a liquid crystal layer sandwiched by the substrates therebetween, one substrate having an electrode and an alignment layer formed on an internal surface in that order from the one substrate while the other substrate having an

electrode and an alignment layer formed on an internal surface in that order from the other substrate;

a front light arranged adjacently to an external surface of the other substrate;

a reflection substrate arranged adjacently to an external surface of the one substrate or between the one substrate and the electrode disposed on the one substrate; and

an optical diffusion layer arranged between the front light and the reflection substrate, serving to flatten the reflection substrate,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view and a surface of each reflection inclined plane is provided with concave portions having a depth within a range of 0.3 μm to 3 μm irregularly, adjacent concave portions arranged irregularly at a pitch between 1 μm and 30 μm , and

wherein the optical diffusion layer is made of a transparent resin or a transparent adhesive having fine particles dispersed therein, wherein a thickness of a thickest portion of the optical diffusion layer is in the range of between 30 μm and 200 μm .

5. (Previously presented) A display according to Claim 4, wherein the optical diffusion layer is arranged between one substrate and the front light.

6. (Previously presented) A display according to Claim 4, wherein the optical diffusion layer is deposited on the reflection substrate, which is arranged between the one substrate and the electrode formed on the internal surface of the one substrate.

7. (Previously presented) A display according to Claim 4, wherein the optical diffusion layer is deposited on the reflection substrate, which is arranged adjacently to the external surface of the one substrate.

8. (Original) A display according to Claim 4, wherein a haze of the optical diffusion layer is between 15% and 30%.

9. (Original) A display according to Claim 4, wherein an inclined angle θ of the reflection inclined plane with respect to a surface of the reflection substrate is between 0° and 30° .

10. (Previously presented) A reflector according to Claim 1, wherein a haze of the optical diffusion layer is at least 15% and less than 20%.

11. (Previously presented) A display according to Claim 4, wherein a haze of the optical diffusion layer is at least 15% and less than 20%.

12. (Previously presented) A reflector according to Claim 1, wherein the fine particles have a particle diameter between $1\ \mu\text{m}$ and $20\ \mu\text{m}$.

13. (Previously presented) A reflector according to Claim 1, wherein the fine particles have a particle diameter between $3\ \mu\text{m}$ and $15\ \mu\text{m}$.

14. (Previously presented) A display according to Claim 4, wherein the fine particles have a particle diameter between $1\ \mu\text{m}$ and $20\ \mu\text{m}$.

15. (Previously presented) A display according to Claim 4, wherein the fine particles have a particle diameter between $3\ \mu\text{m}$ and $15\ \mu\text{m}$.

16. (Previously presented) A reflector according to Claim 1, wherein the fine particles comprise silica, a styrene-butadiene copolymer, divinylbenzene, a urethane resin, a silicone resin, an epoxy resin, or polyethylene.

17. (Previously presented) A display according to Claim 4, wherein the fine particles comprise silica, a styrene-butadiene copolymer, divinylbenzene, a urethane resin, a silicone resin, an epoxy resin, or polyethylene.

18. (Previously presented) A reflector according to Claim 1, wherein the fine particles comprise between 0.1 mass% and 10 mass% of the optical diffusion layer.

19. (Previously presented) A display according to Claim 4, wherein the fine particles comprise is between 0.1 mass% and 10 mass% of the optical diffusion layer.

20. (Currently amended) A reflector comprising:
a reflection substrate; and
an optical diffusion layer deposited so as to flatten the reflection substrate,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view and a surface of each reflection inclined plane is an irregular surface, and

wherein the optical diffusion layer is made of a matrix of a transparent resin or a transparent adhesive, the optical diffusion layer having fine particles with a particle diameter between 1 μm and 20 μm dispersed therein, ~~[[and]]~~ the fine particles comprise- between 0.1 mass% and 10 mass% of the optical diffusion layer, and a thickness of a thickest portion of the optical diffusion layer is in the range of between 30 μm and 200 μm .

21. -23. (Cancelled)

24. (Previously presented) The reflector of Claim 1, wherein an inclination angle of the reflection inclined planes is about one-half of an angle between a normal of a display surface and a main viewing direction of an observer.

25. (Previously presented) The liquid crystal display of Claim 4, wherein an inclination angle of the reflection inclined planes is about one-half of an angle

between a normal of a display surface and a main viewing direction of an observer.

26. (Previously presented) The reflector of Claim 20, wherein an inclination angle of the reflection inclined planes is about one-half of an angle between a normal of a display surface and a main viewing direction of an observer.

27. (Previously presented) The reflector of Claim 1, wherein a pitch of the reflection inclined planes is in the range between 5 μm and 80 μm .

28. (Previously presented) The liquid crystal display of Claim 4, wherein a pitch of the reflection inclined planes is in the range between 5 μm and 80 μm .

29. (Previously presented) The reflector of Claim 20, wherein a pitch of the reflection inclined planes is in the range between 5 μm and 80 μm .

30. (Previously presented) The liquid crystal display of Claim 4, wherein the electrodes on the substrates are arranged at a pitch that is equal to a pitch of the reflection inclined planes.

31. (New) A reflector comprising:
a reflection substrate; and
an optical diffusion layer deposited on the reflection substrate so as to flatten the surface thereof,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view, and a pitch of the reflection inclined planes is in the range between 5 μm and 80 μm , and

wherein the optical diffusion layer is a transparent resin or a transparent adhesive having fine particles dispersed therein, and a thickness of a thickest portion of the optical diffusion layer is in the range of between 30 μm and 200 μm .

32. (New) A reflector comprising:
a reflection substrate; and
an optical diffusion layer deposited on the reflection substrate so as to flatten the surface thereof,
wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view, and
wherein the optical diffusion layer is a transparent resin or a transparent adhesive having fine particles dispersed therein, and a pitch of the reflection inclined planes is in the range between 5 μm and 80 μm .

33. (New) The reflector of claim 31, wherein a surface of each reflection inclined plane is provided with concave portions.

34. (New) The reflector of claim 32, wherein a surface of each reflection inclined plane is provided with concave portions.

35. (New) The reflector of claim 33, wherein a surface of each reflection inclined plane is provided with concave portions having a depth within a range of 0.3 μm to 3 μm irregularly, adjacent concave portions arranged irregularly at a pitch between 1 μm and 30 μm .

36. (New) The reflector of claim 34, wherein a surface of each reflection inclined plane is provided with concave portions having a depth within a range of 0.3 μm to 3 μm irregularly, adjacent concave portions arranged irregularly at a pitch between 1 μm and 30 μm .

37. (New) A liquid crystal display comprising:
a liquid crystal cell which comprises substrates opposing each other and a liquid crystal layer sandwiched by the substrates therebetween, one substrate having an electrode and an alignment layer formed on an internal surface in that order from the one substrate while the other substrate having an

electrode and an alignment layer formed on an internal surface in that order from the other substrate;

a front light arranged adjacently to an external surface of the other substrate;

a reflection substrate arranged adjacently to an external surface of the one substrate or between the one substrate and the electrode disposed on the one substrate; and

an optical diffusion layer arranged between the front light and the reflection substrate, serving to flatten the reflection substrate,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view, and

wherein the optical diffusion layer is made of a transparent resin or a transparent adhesive having fine particles dispersed therein, and a thickness of a thickest portion of the optical diffusion layer is in the range of between 30 μm and 200 μm .

38. (New) A liquid crystal display comprising:

a liquid crystal cell which comprises substrates opposing each other and a liquid crystal layer sandwiched by the substrates therebetween, one substrate having an electrode and an alignment layer formed on an internal surface in that order from the one substrate while the other substrate having an electrode and an alignment layer formed on an internal surface in that order from the other substrate;

a front light arranged adjacently to an external surface of the other substrate;

a reflection substrate arranged adjacently to an external surface of the one substrate or between the one substrate and the electrode disposed on the one substrate; and

an optical diffusion layer arranged between the front light and the reflection substrate, serving to flatten the reflection substrate,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view, and a pitch of the reflection inclined planes is in the range between 5 μm and 80 μm , and

wherein the optical diffusion layer is made of a transparent resin or a transparent adhesive having fine particles dispersed therein.

39. (New) A liquid crystal display comprising:

a liquid crystal cell which comprises substrates opposing each other and a liquid crystal layer sandwiched by the substrates therebetween, one substrate having an electrode and an alignment layer formed on an internal surface in that order from the one substrate while the other substrate having an electrode and an alignment layer formed on an internal surface in that order from the other substrate;

a front light arranged adjacently to an external surface of the other substrate;

a reflection substrate arranged adjacently to an external surface of the one substrate or between the one substrate and the electrode disposed on the one substrate; and

an optical diffusion layer arranged between the front light and the reflection substrate, serving to flatten the reflection substrate,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view, and

wherein the optical diffusion layer is made of a transparent resin or a transparent adhesive having fine particles dispersed therein, and

wherein the electrodes on the substrates are arranged at a pitch that is equal to a pitch of the reflection inclined planes.

40. (New) The liquid crystal display of claim 37, wherein a surface of each reflection inclined plane is provided with concave portions.

41. (New) The liquid crystal display of claim 38, wherein a surface of each reflection inclined plane is provided with concave portions.

42. (New) The liquid crystal display of claim 39, wherein a surface of each reflection inclined plane is provided with concave portions.

43. (New) The liquid crystal display of claim 40, wherein the concave portions have a depth within a range of 0.3 μm to 3 μm irregularly, adjacent concave portions arranged irregularly at a pitch between 1 μm and 30 μm .

44. (New) The liquid crystal display of claim 41, wherein the concave portions have a depth within a range of 0.3 μm to 3 μm irregularly, adjacent concave portions arranged irregularly at a pitch between 1 μm and 30 μm .

45. (New) The liquid crystal display of claim 42, wherein the concave portions have a depth within a range of 0.3 μm to 3 μm irregularly, adjacent concave portions arranged irregularly at a pitch between 1 μm and 30 μm .

46. (New) A reflector comprising:
a reflection substrate; and
an optical diffusion layer deposited so as to flatten the reflection substrate,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view, and

wherein the optical diffusion layer is made of a matrix of a transparent resin or a transparent adhesive, the optical diffusion layer having fine particles with a particle diameter between 1 μm and 20 μm dispersed therein, and the fine particles comprise between 0.1 mass% and 10 mass% of the optical diffusion layer, and a thickness of a thickest portion of the optical diffusion layer is in the range of between 30 μm and 200 μm .

47. (New) A reflector comprising:

a reflection substrate; and

an optical diffusion layer deposited so as to flatten the reflection substrate,

wherein the reflection substrate is provided with a plurality of reflection inclined planes continuously formed on a surface thereof with a stripe geometry in plan view, and

wherein the optical diffusion layer is made of a matrix of a transparent resin or a transparent adhesive, the optical diffusion layer having fine particles with a particle diameter between 1 μm and 20 μm dispersed therein, the fine particles comprise- between 0.1 mass% and 10 mass% of the optical diffusion layer; and, a pitch of the reflection inclined planes is in the range between 5 μm and 80 μm .

48. (New) The reflector of claim 46, wherein a surface of each reflection inclined plane is an irregular surface.

49. (New) The reflector of claim 47, wherein a surface of each reflection inclined plane is an irregular surface.